UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

OFFICE OF THE
REGIONAL ADMINISTRATOR

June 19, 2014

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

RE: Downeast LNG Final Environmental Impact Statement, Washington County, Maine
Docket No. CP07-52-000, CP07-53-000, CP07-53-001 (CEQ # 20140152)

Dear Secretary Bose:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act, we have reviewed the Final Environmental Impact Statement (FEIS) for Downeast LNG, Inc.'s (Downeast) proposed Liquified Natural Gas (LNG) terminal, pipeline and related facilities in Washington County, Maine.

EPA previously commented on the Downeast LNG import project in response to a 2006 FERC scoping notice, a 2009 Draft EIS, and a 2013 Supplemental Draft EIS issued by FERC to address the revised reliability and safety analysis of the LNG terminal and carrier transit.

The FEIS describes the Downeast LNG proposal to construct an LNG import terminal and associated infrastructure in the Town of Robbinston, Maine. The proposed terminal features a proposed 3,862 foot-long pier to receive LNG shipments from vessels that would travel to the site through Passamaquoddy Bay and the St. Croix River. The project also includes two LNG storage tanks, associated LNG vaporization and processing equipment and a 29.8-mile-long, 30-inch diameter sendout pipeline. The proposed sendout pipeline would transport natural gas from the LNG terminal to an interconnect point with Maritimes and Northeast Pipeline L.L.C. (M&NE) near the town of Baileyville, Maine. According to the FEIS, the project no longer requires the expansion of the M&NE system in order for the Downeast facility to move the imported gas to market based on projections that the existing pipeline can accommodate the volume of gas projected from the project. Elimination of the pipeline expansion described in the DEIS significantly reduced the overall environmental impacts of the Downeast project which included impacts to approximately 1000 individual wetlands along the 233 mile project area.

EPA's review of the FEIS focused on issues we raised in our comments on the DEIS on direct and indirect impacts of the proposal. Those issues included impacts to aquatic resources, air quality, marine resources, groundwater, greenhouse gas emissions, and mitigation for identified impacts. Our attached comments identify issues that will need to be more fully addressed during project permitting.

We also understand that Downeast intends to modify the current project to also include export capacity, and will be submitting an application to FERC to address the export proposal. We look forward to working with FERC to address the environmental impacts and the appropriate level of NEPA documentation associated with this new proposal through project scoping and the FERC pre-filing process.

The enclosure to this letter provides detailed comments related to a number of elements of the proposed project and the environmental analysis. My staff is ready to continue to work with FERC and other federal and state agencies, as well as the applicant to provide additional input throughout the balance of the NEPA process (for the current project and modification of the project to accommodate LNG export) and during related project permitting. Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss our comments further.

Sincerely,

H. Curtis Spalding
Regional Administrator

Enclosure

Additional Detailed Comments on the FERC FEIS for the Downeast LNG project in Robbinston, Maine (CEQ # 20140152)

Wetland Issues

Background

FERC published a DEIS for the Downeast LNG project in 2009. The recent publication of the FEIS signals the end of the FERC NEPA review but it does not end agency involvement and coordination as the project will still be the subject of the state and federal permits listed in the FEIS (pages 1-10 to 1-12). Major infrastructure projects in New England typically follow the Corps of Engineers Highway Methodology Process as a means to improve project review efficiency and to reduce delays through integration of NEPA and Clean Water Act Section 404 requirements. In this case, the Downeast LNG project has not been the subject of this type of coordinated review. Instead, review of the FEIS will be followed at some later date by the review of a Section 404 application by EPA and the Corps of Engineers. Even though the FEIS leaves one with the impression that an interagency team (including EPA) has been in active discussions to refine the mitigation plan for aquatic impacts, this is not the case and we have not worked on any aspect of the mitigation plan for the past four years. However, it is our intention to actively participate in the Corps of Engineers' managed permit process for the project with a focus on whether the direct, temporary, and secondary aquatic impacts of the project can be addressed through a comprehensive mitigation package. Our comments in this section identify areas of concern that will need to be addressed as the project moves into the permitting phase. If the project is modified to an export facility we strongly encourage FERC and the applicant to consider an integrated NEPA and 404 process for future work on the new project.

Setting

The proposed 80 acre LNG terminal site is located in Mill Cove, slightly south of the confluence of Passamaquoddy Bay and the St Croix River. The project consists of the marine terminal site, LNG storage tanks, a 29.8 mile 30-inch send-out pipeline connecting to an existing compressor station in Baileyville, Maine, and various other facilities. Numerous streams and freshwater wetlands drain to tributaries and ponds that flow into Mill Cove. These streams and the associated riparian zones serve as wildlife corridors between the streams and nearby undeveloped land. Wetlands, including vernal pools, within the area are plentiful and provide valuable wildlife habitat and function to maintain water quality. Vernal pools are breeding habitat for several species of amphibians and are utilized by other wildlife, including turtles and waterfowl, as feeding areas.

Aquatic Impacts

This proposed project would cause relatively large impacts by altering 35.6 acres of wetlands (26.6 acres for the sendout pipeline with 14.2 acres permanently affected during operation and 9 acres for terminal construction) and crossing 22 waterbodies. According to the FEIS, Downeast proposes horizontal directional drill (HDD) techniques at 9 of the waterbody crossings to reduce impacts, especially for the larger river crossings. The send-out pipeline will feature a 50-foot wide right-of-way (30 feet in wetland areas) that will be maintained through clearing every 3 years. Also, a 10-foot wide area directly over the pipeline will be mowed annually. Both temporary disturbance and permanent losses of wetland acreage correlate with loss of functions

and values including habitat destruction, reduced primary and secondary productivity, and alteration of hydrological functions (e.g., flood storage, low flow maintenance, nutrient and toxicant transformation, sediment trapping, groundwater discharge and recharge). Specific impacts on wildlife include waterfowl, shorebird, and wading bird habitat, wetlands, vernal pools, and upland habitat.

According to the FEIS, the project will potentially impact forty-three vernal pools, ten of which are considered significant by Maine DEP standards. The FEIS notes that Downeast will follow guidelines used for previous pipeline projects in Maine (the Maritimes and Northeast Phase II project) to minimize impacts on vernal pools. The FEIS notes that Maine DEP guidance recommends no disturbance within the vernal pool depression, but the FEIS also contains statements that indicate that vernal pool depressions would be replicated using the same soils excavated. While the FEIS provides a good account of the percent of vernal pool buffer area impacted for the sendout pipeline, it is not clear how many of the vernal pool depressions will be directly impacted as a result of the project. Moreover, the FEIS also discusses the use of HDD techniques to limit impacts, but it is unclear which vernal pools can be avoided using this approach given noted HDD feasibility issues in glacial till deposits--the likely surficial geology under most vernal pools and wetlands in Maine. EPA will seek additional information regarding impacts to vernal pools during the Section 404 review of the project.

Compensatory Mitigation

For compensatory mitigation, EPA typically prefers the Maine In-Lieu-Fee (ILF) program over project specific sites determined by the applicant. The Compensatory Mitigation Rule (40 CFR Part 230, April 10, 2008) contains a preference for mitigation banks and ILF programs over permittee responsible mitigation, and the Maine ILF program has worked especially well in Maine over the last 5 years. ILF projects target larger, more ecologically valuable, parcels that have been prioritized on a landscape or watershed scale. ILF programs consistently include better planning, implementation, and monitoring for each project. Further, the ILF program generally facilitates improved site selection (use of the Maine Wildlife Action Plan), scientific expertise, and owners and easement holders with a vested interest in conservation increasing the chance for project success. However, other mitigation site options should not be ruled out if high value, sustainable sites are available.

FERC (FEIS page 4-62) recommends that, "Downeast should continue consultation with the COE, EPA, and the Maine DIFW and DEP to finalize its wetland mitigation and compensation plan." While we support this ongoing coordination, we note that the document suggests that there has been active coordination on these issues (presumably since the filing of the DEIS). We are not aware of any ongoing coordination. Meaningful work remains as part of the Section 404 review to advance discussions regarding the availability and acceptability of mitigation options to address project impacts.

The FEIS (page 5-7) notes that Downeast does not expect to provide mitigation for temporary wetland impacts associated with the send-out pipeline. We are concerned over this approach, as it not consistent with the Compensatory Mitigation Rule and the Corps New England District's revised mitigation guidance dated July 20, 2010,
(http://www.nae.usace.army.mil/Portals/74/docs/regulatory/

Mitigation/CompensatoryMitigationGuidance.pdf). This issue will need to be addressed more fully in the context of the Section 404 permit review for the project. In addition, we believe an expanded discussion of the use of impact minimization techniques such as HDD will be a key focus area for future interagency discussions about project impacts.

Eelgrass

The extent of the eelgrass resource in the FEIS was based on Maine Division of Marine Resources (DMR) aerial mapping completed in 2010 after publication of the DEIS. The inclusion of these maps improves the EIS and provides a good place to begin as to where to look for eelgrass near the project. These maps, however, have limited value for specific project impact assessment as aerial photography can greatly underestimate the extent of the resource, in particular losing the deep edge of the meadow. Site specific mapping will be required to support further project design, permitting and mitigation discussions.

The FEIS notes that previous Maine DMR mapping in the 1990s did not show any eelgrass near the project site. If (as it appears) eelgrass is a recent arrival to this embayment, then it is likely that the polygon drawn in the 2010 mapping no longer accurately represents current limits of eelgrass. Eelgrass will grow to expand to fill in suitable habitat based on depth, sediment type, and exposure. Based on the depth contours presented in Figure 4.4-2 and sediment data presented in the FEIS, it appears that a much larger area of Mill Cove is suitable for eelgrass growth. In light of the high ecological value of eelgrass, the large regional decline[1] in this resource and the limited success in mitigating/restoring it, we believe that an in-water assessment to more accurately delineate the resource needs to be completed as part of the review of the project during permitting. In addition, depending on the results of a more thorough delineation, additional options that completely avoid or greatly minimize impacts to eelgrass may be necessary.

Unfortunately, eelgrass mitigation has a fairly poor track record in New England waters with many expensive attempts and few documented successes. EPA requests the opportunity to be involved in the design of any future in-water survey and intends to remain involved in the permit review for the project, including the development of appropriate mitigation to address any unavoidable impacts to eelgrass.

Invasive Species

The FEIS mentions the ability of invasive species to colonize new pilings (associated with the terminal pier) and dismisses them as insignificant when compared to all of the (existing) hard substrate in the ecosystem. While we agree that the new pilings would represent a small percentage of the hard substrate, we do not believe the discussion fully reflects the risk of potential introductions of new invasive species from the project. These new pilings will be in close proximity to foreign vessel hulls, which are known to be vectors for invasive species. The newly installed pilings also do not have an established fouling community cover like most hard substrate in the system already does, and therefore represent a likely ready platform for

[1] Invasive green crabs have dramatically impacted eelgrass in Atlantic Canada and in Maine. Thousands of acres of eelgrass in this region have been lost in the last 2-3 years due to the foraging activities of these crabs.

colonization by invasives. In a similar situation where concern about invasives is an issue, the Commonwealth of Massachusetts is monitoring pilings of a new international port facility in New Bedford, Massachusetts to determine the extent to which invasive species are colonizing the new pilings. EPA believes a similar effort should be made at this facility and we hope to work with the Corps, Maine DMR and the applicant to develop an acceptable monitoring/sampling program to address this critical issue.

Sediment Resuspension

Based on our experience in other locations, we anticipate that propeller wash from vessels serving the project has the potential to result in sedimentation impacts to the newly identified eelgrass resource in the project area. Additional work to delineate the limits of eelgrass and to determine the potential for sedimentation impacts will be an important part of future permitting for the project.

Groundwater Resources

The FEIS provides a description of remedial actions to restore wells damaged during construction/operation of the project. In particular we support FERC staff recommended mitigation measure number 17 (FEIS page 5-29) that requires pre- and post-construction monitoring of private wells and springs. We continue to believe that preconstruction notification of water suppliers along the pipeline route, through a requirement in the Spill Prevention Control and Countermeasure Plan (SPCC), should be recommended by FERC for the project.

Air Quality

Conformity

Our air quality concerns identified at the scoping and DEIS phases have been satisfactorily addressed. The final EIS correctly reflects that General Conformity does not apply to this project as Washington County, Maine, is attaining all National Ambient Air Quality Standards and does not have any maintenance plan(s). (FEIS page 4-257).

Diesel Retrofits/Clean Fuels

The FEIS (page 4-262) notes that Downeast has committed to incorporate contract language suggested by EPA comments on the DEIS to address the public health impacts from diesel exhaust of construction vehicles and equipment. We support this commitment.

We note that the FEIS states on page 2-11, that "*The LNG vessels proposed for use in the Downeast Project would have to comply with all federal and international standards, established by many different entities generally categorized as the International Maritime Organization (IMO), the respective flag state, port state, and classification societies regarding LNG shipping.*" We point out that the FEIS correctly reflects that the International Maritime Organization (IMO) amendment of the International Convention for the Prevention of Pollution from Ships (MARPOL) designates specific portions of U.S., Canadian and French waters as an Emission Control Area (ECA). For this area, the effective date of the first-phase fuel sulfur standard was 2012, and the second phase begins in 2015. Beginning in 2016, new vessels will have to use advanced emission control technologies. (FEIS page 4-258)

Emissions

Chapter 4 of the FEIS addresses the results of a new AERMOD air quality dispersion model analysis to evaluate air quality impacts attributable to the Downeast LNG Project stationary emission sources and related maritime vessel emissions; as well as combined emissions from the Downeast LNG Project operations, Domtar Paper Plant operations, and potential operations at the previously proposed Calais LNG facility. For conservatism, this analysis assumes all four of the planned submerged combustion vaporizers (SCVs) at the Downeast LNG facility are operating continuously (8760 hours per year), even though one of the submerged combustion vaporizer is a standby unit and it is unlikely that the other three units would operate continuously. This analysis, first presented in the FEIS, indicates potential adverse impact on nearby Class I areas due to deposition of sulfur and nitrogen. As the direct emissions from the Downeast LNG Terminal will be above the major source threshold for Prevention of Significant Deterioration (PSD) review, the terminal will require a PSD permit from the Maine Department of Environmental Protection, Bureau of Air Quality. PSD regulations provide special protection to nearby Class I areas [Roosevelt Campobello International Park (RCIP); Moosehorn Wilderness Area - Baring Unit (MWABU); Moosehorn Wilderness Area - Edmunds Unit (MWAEU); and Acadia National Park] or areas of special national or regional natural, scenic, recreational, or historic value.

Greenhouse Gas Emissions

We acknowledge and appreciate that the FEIS addresses EPA's comments on the DEIS by including a discussion of the greenhouse gas (GHG) emissions associated with construction of the terminal and pipeline portions of the project, and annual emissions from the operation of the liquefaction facility. The FEIS also notes that because emissions are expected to exceed 25,000 metric tons per year the project would be required to comply with EPA's Mandatory Reporting of Greenhouse Gases Rule. In addition, the FEIS also notes a commitment by Downeast LNG to join the Natural Gas STAR program.

Since providing our comments on the DEIS in 2009, the analysis of GHG emissions under NEPA has evolved. For example, in 2010, the Council on Environmental Quality (CEQ) published draft guidance on considering GHG emissions and climate change impacts in NEPA (cite). This draft CEQ guidance generally explains how the NEPA requirement to consider reasonably forseeable impacts of major federal actions should be implemented with regard to GHG emissions and indirect effects of proposed actions. While the FEIS describes impacts associated with the construction and operation of the proposed facility, it does not include a discussion of GHG emissions from all stages of a project, from production through transmission and combustion.

In addition, since the FEIS for this project was published, DOE has issued a document that is helpful in assessing the GHG emissions implications of the project - the National Energy Technology Laboratory (NETL): "Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States[2]" which is currently out for public comment.

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[2] Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States. DOE/NETL-2014/1649 (http://energy.gov/fe/life-cycle-greenhouse-gas-perspective-exporting-liquefied-natural-gas-united-states)

Although EPA has not reviewed the report in detail and it does not specifically address LNG imports, it does appear to provide a helpful overview of GHG emissions from all stages of an LNG project, from production through transmission and combustion. We recommend that the report be considered as part of the decision making for this project and incorporated by reference in the NEPA analyses for future LNG import terminal proposals. In addition, FERC may also want to consider adapting this analysis to more specifically consider the GHG implications of this and future projects.